



2022 STRATEGIC PLAN



STENNIS SPACE CENTER



"I don't know yet what method we will use to get to the Moon, but I do know that we have to go through Mississippi to get there!"

Wernher von Braun

For more than 50 years, since the early 1960s, John C. Stennis Space Center has powered this nation's great space programs – testing the rocket engines and stages for Apollo and space shuttle missions. The center has grown into a sprawling federal city, enabling more than 40 resident agencies and partners to join in the NASA mission and to pursue their own endeavors as well. Stennis continues to play a central role in the future success of NASA. The following pages highlight the agency's mission, how Stennis fits in and the center's strategic plan for achieving its role. These are exciting times, and I hope you join us for the adventure.

Richard J. Gilbrech

Dr. Richard J. Gilbrech
Director, John C. Stennis Space Center

On the cover: *Clockwise from top*, E Test Complex, RS-25 Engine test, Autonomous Systems Lab logo, and Exploration Upper Stage.

NASA's VISION, MISSION, & GOALS

VISION

Exploring the secrets of the universe for the benefit of all.

MISSION

NASA explores the unknown in air and space, innovates for the benefit of humanity, and inspires the world through discovery.

Theme	Goal Statement
Discover	Expand human knowledge through new scientific discoveries.
Explore	Extend human presence to the Moon and on towards Mars for sustainable long-term exploration, development, and utilization.
Innovate	Catalyze economic growth and drive innovation to address national challenges.
Advance	Enhance capabilities and operations to catalyze current and future mission success.

NASA has outlined clear mission goals for the future. Stennis Space Center supports all of these goals. In addition to testing engines and rocket stages needed to expand the human presence in space, Stennis will work to grow and maximize as a federal city and as an economic and technological engine for south Mississippi and the nation.



When it comes to expanding the human presence in space, NASA is on the edge of a great new era in space exploration. In the years ahead, humans will travel farther into space than ever, returning to the Moon and traveling on to Mars. Stennis is at the forefront of that effort, testing the rocket engines and stages that will help power NASA to reach its Humans in Space and Explore Moon to Mars mission goals.

STENNIS' VISION & MISSION

VISION

Stennis Space Center leads propulsion testing and enables partner mission success.

MISSION

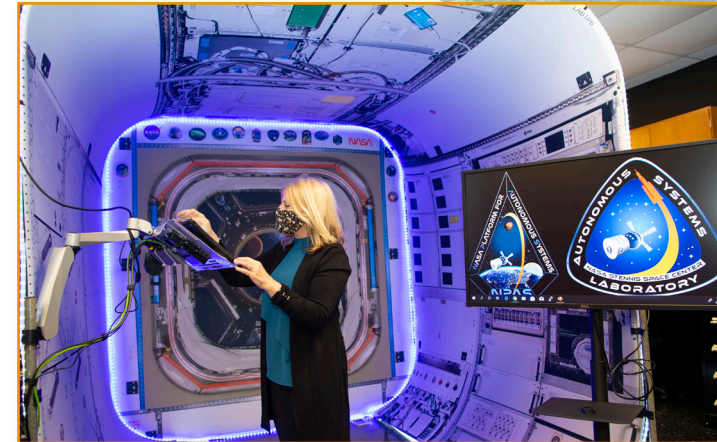
Stennis Space Center is the partner of choice for providing propulsion test capabilities to the nation. Stennis utilizes its unique location and assets to collaborate with other agencies, academia, and industry to develop and test autonomous systems, enhance national security, and increase knowledge of the Earth and its oceans.



PROPULSION TESTING

STRATEGIC GOAL # 1

By 2025, Stennis Space Center will be home to a modern, sustainable propulsion test enterprise providing world class test services to NASA, other government agencies, and commercial customers, as well as fostering an entrepreneur-friendly environment where commercial providers design, manufacture, assemble, and test space launch hardware.



OBJECTIVES

1.1 Enable mission success for NASA and other government agency test programs as a test service provider.

1.1.1 Sustain a flexible, experienced civil service and contractor workforce capable of providing exceptional rocket propulsion test services throughout the project lifecycle.

1.1.2 Maintain unique, world-class test facilities and infrastructure in a high state of readiness. Identify and prioritize capital investment projects for test stand and infrastructure refurbishment/replacement that provide capabilities for rocket propulsion testing.

1.2 Enable commercial propulsion providers to locate at Stennis as long-term tenants, ensuring the viability of Stennis as a propulsion testing hub.

1.2.1 Develop and implement flexible, industry-friendly business and test operations models, policies, processes, and procedures that encourage commercial propulsion providers to establish a permanent presence at Stennis.

1.2.2 Develop and implement test operations models that provide responsive test capabilities and services with reasonable, predictable costs and schedules.

1.2.3 Provide a range of opportunities across the entire value stream (design/manufacturing/assembly/test) to meet commercial provider needs (including timeliness), including government facilities, green field sites, and Enterprise Park.

1.2.4 Strategically invest in, and divest of, facilities to support the commercial space industry.

1.3 Sustain a robust, unique national capability for high-pressure component and subsystem development testing.

1.3.1 Strategically invest in high-pressure testing system capabilities and critical spares to provide customers with timely access to critical test facilities.

1.3.2 Evaluate options to establish common, well-defined interfaces to minimize specialized test equipment construction.

1.4 Develop, demonstrate, and deploy technologies that enhance the effectiveness and efficiency of the propulsion test mission.

1.4.1 Leverage agency technology investments, technology transfer, and regional economic development initiatives to capitalize on technology development opportunities.

1.4.2 Continuously enhance the enterprise electronic Product Data Lifecycle Management (PDLM) capabilities engineering, configuration management, work control, and other functions in a fully integrated system.

1.4.3 Continuously enhance the integration of autonomous operations at test stands and test support systems. Incorporate intelligent, autonomous operations into the design of facilities and systems.

1.4.4 Employ real-time data-driven decision making to optimize test services, base operations, and business processes.

1.4.5 Incorporate advanced technologies and innovative processes, at an acceptable risk, into test programs to improve effectiveness and efficiency while maintaining sufficiently rigorous processes and practices to support flight hardware.

INNOVATION & PARTNERSHIPS

STRATEGIC GOAL # 2

Stennis Space Center will continue to provide an environment that enables efficient and effective support of NASA and tenant missions, while providing growth opportunities for development, test, and operation of unmanned autonomous systems by NASA, other governmental agencies and industry.



OBJECTIVES

2.1 For the federal city, continue to improve a transparent business process that provides efficient and effective city services, provides a standard infrastructure condition to tenants at a predictable cost, reimburses NASA for costs of accommodating resident organizations and customers, and effectively integrates the mission needs of all resident organizations and customers.

2.1.1 Identify and understand anticipated needs and capabilities/services for the center and commercial customers and provide a flexible, cost-effective institutional base to enable success.

2.1.2 Research and analyze business cases for privatization/municipalization of horizontal infrastructure and medical/fire services.

2.1.3 Continue to evaluate options for evolution of the federal city management structure to ensure cost effectiveness, streamline service delivery, and improve responsiveness to tenant needs.

2.1.4 Explore possibility of transferring ownership of non-shared facilities to tenants – to include total responsibility for facility/area maintenance.

2.2 Create economic development opportunities that support the NASA mission and federal city tenant missions.

2.2.1 Mature the Enterprise Park concept to enable a better understanding of its possible effects on, or implications for, the federal city concept and make any necessary adjustments to either concept.

2.2.2 Develop partnership solutions for emerging economic development opportunities to define a set of options dependent on degree of tenant autonomy and the cost of services and support to be provided.

2.2.3 Facilitate access (short-term and long-term) to underutilized NASA land, infrastructure, and airspace for potential partners, including design, manufacturing, assembly, and testing of propulsion systems and unmanned/autonomous systems.

2.3 Leverage Stennis' unique location, buffer zone, restricted airspace, partnerships, and technical resources to attract and support the design, manufacture, test, and operation of unmanned and autonomous air, ground, and water vehicle systems.

2.3.1 Provide safe and effective range operations for expanded restricted airspace at Stennis.

2.3.2 Leverage NASA, U.S. Navy, academia, and other tenant work on autonomous systems to become a premier autonomous system development, test, and operations site across air/ground/marine environments.

2.3.3 Integrate unmanned systems testing into the Stennis master planning process to enable use of the NASA-owned lands and the buffer zone easement for evolving hazardous test and evaluation operations while protecting the public, workforce, property, and rocket propulsion test mission.

2.4 Sustain a flexible, experienced workforce that is agile, skilled, and capable of providing exceptional mission support services.



www.nasa.gov/centers/stennis
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